



Department of Commerce

Safety & Buildings Division

201 West Washington Avenue

P.O. Box 2658

Madison, WI 53701-2658

Evaluation #

200104-W Revised
Replaces 950048-W)

Wisconsin Building Products Evaluation

Material

Laminated Veneer Lumber (LVL) G-P Lam®

Manufacturer

Georgia-Pacific Corporation
1000 North Park Drive
Roxboro, NC 27573

SCOPE OF EVALUATION

G-P Lam® Laminated Veneer Lumber (LVL) manufactured by Georgia-Pacific Corporation was evaluated for use as structural framing lumber in accordance with **s. Comm 21.02 (3) (a)** of the current edition of the Wisconsin Administrative Uniform Dwelling Code. G-P Lam® Laminated Veneer Lumber (LVL) was also evaluated in accordance with **ss. Comm 53.60 and 53.61 (2)**, of the current edition of the Wisconsin Administrative Building And Heating, Ventilating And Air Conditioning Code.

DESCRIPTION AND USE

G-P Lam Laminated Veneer Lumber (LVL) is manufactured from veneers (1/8- or 1/7-inch thick), of Southern Pine, Yellow Poplar, or Eastern Species, by parallel laminating (grain oriented parallel to the billet length), and curing the glued assembly in a hot press. The veneers are end-jointed during assembly of the billet and end-joints glued with a phenolic adhesive. The veneers are coated on one side with an exterior-type phenolic adhesive complying with ASTM D2559. Lay-up patterns of various veneer quantities, grades and thickness are compressed to the required billet thickness and glue lines cured with heat.

G-P Lam LVL can be used as structural members in applications such as floor joist, ridge beams, door and window headers, concrete form work and shoring. In addition, G-P Lam LVL is used as flange material in the production of GPI Series I-Joists.

G-P Lam LVL is available in 2.2E, 2.0E and 1.8E grades, thickness of 3/4-inch to 5 1/4 inches, widths of 1 1/2 inches to 48 inches and lengths up to 80 feet.

G-P Lam LVL is produced in five (5) grade/species combinations as summarized below:

Species	Grade
Yellow Poplar (YP)	1.8E
	2.0E
Southern Yellow Pine (SYP)	2.0E
	2.2E
Eastern Species (ES)	2.0E

Bolt design values for installation perpendicular to the glue lines are as provided for Douglas Fir-Larch (G=0.50) solid-sawn lumber as specified in the National Design Specification.

Lateral nail holding and withdrawal values are as provided in the National Design Specification for Wood Construction for Douglas Fir-Larch sawn lumber. Nails installed perpendicular to the glue lines on the wide face may be installed in accordance with the NDS.

Nails installed parallel to the glue lines on the narrow face (edge) of Southern Pine, Yellow Poplar or Eastern Species G-P Lam LVL 3/4-inch or thicker and 3 1/2 inches or wider shall be spaced a minimum of 6 inches for 10d and 12d common nails or No. 14-gauge staples. Yellow Poplar G-P Lam LVL 1 3/4-inch or thicker and 3 1/2 inches or wider may be nailed not less than 4 inches on center for 10d and 12d common nails or 14-gauge staples. Southern Pine or Eastern Species G-P Lam LVL 1 3/4-inch or thicker and 3 1/2 inches or wider may be nailed not less than 6 inches on center for 10d and 12d common nails or 14-gauge staples and 5 1/4 inches or wider may be nailed at 4 inches on center for 10d and 12d common nails or 14-gauge staples. A 16d common nail may be installed at a minimum 8-inch spacing parallel to glue lines on the edge (narrow face) of Southern Pine, Yellow Poplar or Eastern Species G-P Lam LVL 1 3/4 inches or thicker and 5 1/4 inches or wider.

Specific approval is required for nail and bolt connections not noted herein.

TESTS

G-P Lam LVL Quality Control Manual is on file with the department.

Mechanical properties tests on G-P Lam LVL were performed in accordance with ASTM 5456. Allowable design values were assigned in accordance with ASTM D5456 and other appropriate standards.

All mechanical property testing was conducted and/or witnessed by APA-EWS. Test data and results are on file with the department.

LIMITATIONS OF APPROVAL

The design procedures for solid-sawn lumber contained in the National Design Specification for Wood Construction (NDS) is applicable to G-P Lam LVL unless otherwise noted. Unless otherwise noted in this evaluation, adjustments for load duration are as specified in **s. Comm 21.02 (3)** and **s. Comm 53.61 (2)**. The allowable design stresses may be adjusted for duration of load and repetitive member use in accordance with the provisions in **Chapter Comm 53**.

This evaluation number does not take the place of structural calculations for assemblies made of G-P Lam LVL when required by **Chapters Comm 50-64** or **Chapters Comm 20-25**.

Applications not covered by this approval and requiring special considerations may be handled by contacting Georgia-Pacific Corporation's Engineered Lumber Technical Service for guidance.

This approval will be valid through December 31, 2006, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by: _____

Revision Date: March 19, 2001

Approval Date: March 5, 2001

By: _____

Lee E. Finley, Jr.
Product & Material Review
Integrated Services Bureau